

CLAIMS

1. A guide route search device, characterized by comprising:

5 designating means for designating at least two or more destinations;

creating means for creating plural route patterns in which orders of visit to the plural destinations are different from one another; and

10 judging means for judging whether the plural route patterns are route patterns that satisfy destination conditions in all the destinations.

2. The guide route search device according to claim 1, characterized by further comprising selecting means for selecting a guide pattern that satisfies the destination conditions in all the destinations as a guide route.

20 3. The guide route search device according to claim 1, characterized by further comprising:

adjusting means for performing, for route patterns judged as not satisfying the destination conditions at least at one destination by the judging means, 25 adjustment of a non-traveling time such that the route patterns satisfy the destination conditions in all the destinations; and

30 selecting means for selecting a specific route pattern out of the route patterns judged as satisfying the destination conditions in all the destinations by

the judging means and the route patterns updated by the adjusting means.

4. The guide route search device according to
5 claim 1, characterized by further comprising:

updating means for updating, for route patterns judged as not satisfying the destination conditions at least at one destination by the judging means, the route patterns such that the route patterns satisfy the 10 destination conditions in all the destinations; and

selecting means for selecting a specific route pattern out of the route patterns judged as satisfying the destination conditions in all the destinations by the judging means and the route patterns updated by the 15 updating means.

5. The guide route search device according to
claim 1, characterized by further comprising:

updating means for updating, for route patterns 20 judged as not satisfying the destination conditions at least at one destination by the judging means, the route patterns such that the route patterns satisfy the destination conditions in all the destinations; and

means for displaying at least two route patterns 25 out of the route patterns judged as satisfying the destination conditions in all the destinations by the judging means and the route patterns updated by the updating means.

30 6. The guide route search device according to

claim 1, characterized by further comprising route pattern editing means for executing, for route patterns in which destinations are judged as satisfying the destination conditions by the judging means, any one of 5 addition of destinations, deletion of destinations, change of destinations, and rearrangement of destinations as correction of the route patterns and causing the judging means to judge whether destinations in the route patterns after the correction satisfy the 10 destination conditions.

7. The guide route search device according to claim 2, characterized by further comprising:

15 display means for superimposing the guide route selected by the selecting means on a map image together with an image indicating a location of the guide route search device itself before route guide;

20 moving means for moving the image indicating a location of the guide route search device itself along the guide route;

time calculating means for calculating an arrival time at a location of the image moved by the moving means; and

25 updating means for changing a color and/or brightness of the map image according to the arrival time calculated.

30 8. The guide route search device according to claim 2, characterized in that the judging means judges whether route patterns are route patterns that satisfy

the destination conditions in all the destinations on the basis of destination conditions for each genre of the destinations.

5 9. The guide route search device according to claim
7, characterized in that the judging means includes destination condition updating means for updating, when the destination for each genre is not in a business hour of the destination, updating the destination conditions
10 for each genre such that the destination conditions for each genre are in a business hour of the route point.

10. The guide route search device according to claim 2, characterized in that the selecting means
15 judges whether route points of identical or similar genres continue in the route pattern and, when destinations of identical or similar genres do not continue, selects the route pattern as the guide route.

20 11. The guide route search device according to claim 6, characterized in that the route pattern editing means inserts, in the case in which a new destination is inserted in a certain insertion place in route patterns in which destinations are judged as satisfying the
25 destination conditions by the judging means, when it is judged by the judging means that destinations in the route patterns after correction do not satisfy the destination conditions, the new destination in another insertion place on the guide route.

12. The guide route search device according to
claim 6, characterized in that, the guide route search
device inserts, when the route pattern editing means
executes addition of a destination, a new destination in
5 each of plural insertion places, in which a destination
can be inserted, on route patterns in which destinations
are judged as satisfying the destination conditions by
the judging means to create plural route patterns and
causes the judging means to judge whether destinations
10 satisfy the destination conditions for each of the
plural route patterns created.

13. A guide route search device, characterized by
comprising:
15 designating means for designating at least two or
more destinations;
creating means for creating plural route patterns
in which orders of visiting the plural destinations are
different from one another; and
20 display means for displaying at least two route
patterns among the plural route patterns created by the
creating means.

14. A guide route search device, characterized by
25 comprising:
designating means for designating at least two or
more destinations;
means for designating a stay time in each of the
plural destinations;
30 creating means for creating route patterns

including visiting order information and guide time information of the plural destinations taking into account the stay time designated in each of the destinations; and

5 route pattern selecting means for setting one of the route patterns created by the creating means as a guide route.

15. The guide route search device according to
10 claim 14, characterized in that

the means for designating a stay time includes means for selecting one stay time data out of plural stay time data at the destination, and

15 the stay time in each of the destinations is taken into account on the basis of the stay time data selected.

16. The guide route search device according to
claim 14, characterized in that the means for designating a stay time includes stay time learning
20 means for setting and/or updating the stay time data for each of the destinations on the basis of an actual stay time at the destination, and

the stay time is taken into account on the basis of the stay time data in each of the destinations.

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17. The guide route search device according to
claim 15, characterized in that the stay time selecting means operates to select optimum one stay time data out of plural stay time data provided for each driver, each
30 male or female, each fellow passenger group, each age,

each season, each day of week, each time frame, or each number of people and/or passenger type of people guided on the guide route.

5 18. A guide route search method, characterized by comprising:

 a step of designating at least two or more destinations;

10 a step of creating plural route patterns in which orders of visiting the plural destinations are different from one another; and

 a step of judging whether the plural route patterns are route patterns that satisfy destination conditions in all the destinations.

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 19. A guide route search method, characterized by comprising:

 a step of designating at least two or more destinations;

20 a step of creating plural route patterns in which orders of visiting the plural destinations are different from one another; and

 a step of displaying at least two route patterns among the plural route patterns created in the creating step.

25 20. A guide route search method, characterized by comprising:

 a step of designating at least two or more destinations;

a step of designating a stay time in each of the destinations;

5 a step of creating route patterns including visiting order information and guide time information of the plural destinations taking into account the stay time designated in each of the destinations; and

a step of selecting one of the route patterns created in the creating step as a guide route.

10 21. A computer program for causing a guide route search method to operate, the guide route search method comprising:

a step of designating at least two or more destinations;

15 a step of creating plural route patterns in which orders of visiting the plural destinations are different from one another; and

a step of judging whether the plural route patterns are route patterns that satisfy destination 20 conditions in all the destinations.

22. A computer program for causing a guide route search method to operate, the guide route search method comprising:

25 a step of designating at least two or more destinations;

a step of creating plural route patterns in which orders of visiting the plural destinations are different from one another; and

30 a step of displaying at least two route patterns

among the plural route patterns created in the creating step.

23. A computer program for causing a guide route search method to operate, the guide route search method comprising:

5 a step of designating at least two or more destinations;

10 a step of designating a stay time in each of the destinations;

a step of creating route patterns including visiting order information and guide time information of the plural destinations taking into account the stay time designated in each of the destinations; and

15 a step of selecting one of the route patterns created in the creating step as a guide route.